

Please replace paragraph [0066] as follows:

C2 [0066] Thereafter, as shown in Fig. 2b, an n-type impurity (phosphorus (P) or arsenic (As)) is ion-implanted into the semiconductor substrate 1 at opposite sides of the gate electrode 7 on the p-type well 3, thereby forming n-type semiconductor regions 8 (source, drain). Likewise, a p-type impurity (e.g. boron) is ion-implanted into the semiconductor substrate 1 at opposite sides of the gate electrode 7 on the n-type well 4, thereby forming p-type semiconductor regions 9 (source, drain).

Please replace paragraph [0076] as follows:

C3 [0076] Next, as shown in Fig. 5a, a titanium nitride film (not shown) is formed, by the CVD method, on the interlayer insulating film 18 including the contact hole 20, followed by further formation of a tungsten (W) film (i.e. a first conductive film defined in Claim 3). Next, the titanium nitride film (TiN) and the tungsten film are removed by CMP from portions other than the contact hole 20. It will be noted that the titanium nitride film may be formed by a sputtering method. The titanium nitride film may be formed of a laminated film consisting of titanium (Ti) and titanium nitride (TiN).

Please replace paragraph [0090] as follows:

C4 [0090] Next, as shown in Fig. 8a, a silicon nitride film 28 is formed on the silicon oxide film 23 and the wiring 26 (tungsten film 26c), followed by further deposition of a silicon oxide film 29 by a CVD method.

Please replace paragraph [0100] as follows:

C5 [0100] The plug 31 is formed in the following manner. Initially, after conz formation of a titanium nitride film 31a by a CVD method or sputtering method on the

silicon oxide 29 including the inside of the contact hole 30, a tungsten film 31b is formed according to a CVD method. Next, the titanium nitride film 31a and the tungsten film 31b, both outside the contact hole 30, are removed by CMP, thereby forming the plug 31.

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It should be noted that, like the wiring 26, a copper film may be formed on the titanium nitride film 31a by sputtering or plating, thereby providing a copper plug 31. In this case, there may be used, in place of the titanium nitride film 31a, not only a single-layered film, for example, of tantalum, tantalum nitride, tungsten or tungsten nitride and a three-layered laminated film wherein a titanium nitride film is formed on a titanium film, on which a titanium film is further formed (Ti/TiN/Ti), but also a laminated film of Ti/TiN, Ta/TaN/Ta, Ta/TaN or the like.

Please replace paragraph [0102] as follows:

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[0102] Thereafter, like the case of the wiring groove 25, the silicon oxide film 33 is removed by etching from a region where a second wiring is to be formed. The silicon nitride film 32 exposed by the etching is further etched to form a groove 34 for wiring.

Please replace paragraph [0115] as follows:

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[0115] In the embodiment described hereinabove, the wiring 26 is formed as a first layer wiring and the wiring 35 is formed as a second layer wiring, and the aluminum wiring 40 is formed on the second layer wiring via the plug 39. Alternatively, as shown in Fig. 12, a third layer wiring M3 and a fourth layer wiring M4 may be formed between the second layer wiring 35 and the aluminum wiring 40. In such a case, the third layer wiring M3 and the fourth layer wiring M4 may be, respectively, formed like the first and second layer wirings 26, 35 wherein tungsten films M3c, M4c are, respectively,

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formed on the wiring surface. A plug P3 between the third layer wiring and the fourth layer wiring and a plug P4 between the fourth layer wiring and the aluminum wiring 4 may be, respectively, formed in the same manner as the plugs 31, 39. Reference numerals 49, 51, 52 and 55, respectively, indicate a silicon nitride film, and reference numerals 50, 53, 54 and 56, respectively, indicate a silicon oxide film.

Please replace paragraph [0150] as follows:

C8

[0150] Further, as described in Embodiment 1 while referring to Fig. 29, the formation of the tungsten film 35c can prevent the surface of wiring 35 from being oxidized, reducing the rise in the wiring resistance.

Please replace paragraph [0154] as follows:

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[0154] In this embodiment, although the first layer wiring 26 and the second layer wiring 35 are formed, and the aluminum wiring 40 is formed on the second layer wiring 35 through the plug 39, a third layer wiring M3 and a fourth layer wiring M4 may be formed between the second layer wiring and the aluminum wiring 40 (Fig. 21), like Embodiment 1. In such a case, the third layer wiring and the fourth layer wiring are formed according to the dual damascene method, like the first and second layer wirings. More particularly, after the formation of a wiring groove and a contact hole, they are simultaneously buried to form the wirings. The wirings are formed on the surfaces thereof with tungsten films (M3c, M4c).

Please replace paragraph [0156] as follows:

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[0156] In Embodiments 1 and 2, after the formation of the tungsten films 26c, 35c (see Figs. 7b and 9 in Embodiment 1 and Figs. 15 and 19 in Embodiment 2), the

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silicon nitride films 28, 36 and the silicon oxide films 29, 37 are formed on the tungsten films 26c, 35c, respectively. Alternatively, as shown in Figs. 25a and 25b, silicon oxide films (hereinafter referred to as TEOS film) 328, 336, which are deposited according to a CVD method using tetraethoxysilane as a starting gas, are thinly formed on the tungsten films 26c, 35c, respectively, followed by further formation thereon of insulating films 329, 337 having a dielectric constant lower than the TEOS films (i.e. a dielectric constant of 4 or below). It will be noted that a carbon-containing silicon-based insulating film, such as a silicon carbide film, an SiCO film or the like, may be used in place of the TEOS films 328, 336. The carbon-containing silicon-based insulating film, such as SiC or SiCO, has a dielectric constant as low as $\epsilon \approx 4$ to 6, and serves as a diffusion-preventing (barrier) layer for Cu, like a silicon nitride (SiN) film.

Please replace paragraph [0161] as follows:

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[0161] In Embodiments 1 to 3, after the formation of the tungsten films 26c, 35c (see Figs. 7b and 9 in Embodiment 1 and Figs. 15a and 19 in Embodiment 2), the silicon nitride films 28, 36 and the silicon oxide films 29, 37 are, respectively, formed on the tungsten films 26c, 35c. Instead, as shown in Figs. 26a and 26b, insulating films 428, 436, which include a silicon nitride film, a PSG film, or a carbon-containing silicon-based insulating film, such as a silicon carbide (SiC) film or a SiCO film, and which have the capability of preventing diffusion of copper, may be formed on the tungsten films 26c, 35c. Moreover, insulating films 429, 437 made of a low dielectric material having a dielectric constant lower than the insulating films 428, 436 are formed on the tungsten films 26c, 35c, respectively. The insulating films 429, 437 made of the low dielectric material include, for example, those insulating films having a dielectric constant of 4 or below, such as a TEOS film, a SiOF film, an organic coating film, and a

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porous silica film.

Please replace paragraph [0167] as follows:

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[0167] After CMP of the copper films 26b, 36b (see Fig. 7a in Embodiment 1 and Fig. 18b in Embodiment 2), the substrate surfaces (including the surfaces of the copper films 26b, 35b and the silicon oxide films 23, 33) are cleaned with a cleaning solution, such as a solution for removing foreign matter and contaminant metals, after which tungsten films 26c, 35c are formed on the wirings 26, 35 by selective or preferential growth. Such a solution should contain at least one of hydrogen fluoride (HF), citric acid, oxalic acid, hydrogen peroxide (H_2O_2), hydrochloric acid (HCl), sulfuric acid (H_2SO_4), ammonia (NH_3) and aminoethanol.

Please replace paragraph [0169] as follows:

C13

[0169] Fig. 28a is a graph showing the yield for wiring short-circuiting in the cases where cleaning with a hydrogen fluoride (HF) solution is effected for treating times of 20 seconds (B) and 60 seconds (C) and in the case where no cleaning with a hydrogen fluoride solution is effected (A).

Please replace paragraph [0184] as follows:

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[0184] After the selective or preferential growth of the tungsten films 26c, 35c on the surfaces of the wirings 26, 35 (see Figs. 7b and 9 in Embodiment 1 and Figs. 15a and 19 in Embodiment 2), the substrate surfaces (including the surfaces of the tungsten films 26c, 35c and the silicon oxide films 23, 33, and the like) are cleaned with a solution capable of removing contaminant metals and containing at least one of hydrogen fluoride (HF), hydrogen peroxide (H_2O_2), citric acid and the like, as mentioned